

## Federal Communications Commission

## § 80.379

(3) In addition to the conditions in (2) of this paragraph ship stations are subject to the following conditions:

(i) Transponders used for safety purposes will be authorized in the 2900–3100 MHz, 5470–5650 MHz and 9300–9500 MHz bands. Transponders used for non-safety purposes will be confined to the 2930–2950 MHz, 5470–5480 MHz and 9300–9500 MHz subbands only;

(ii) In the 2900–2920 MHz and 9300–9320 MHz subbands the use of radars other than those installed prior to January 2, 1976, is not permitted;

(iii) In the 2920–3100 MHz and 9320–9500 MHz bands non-selectable transponders will be authorized only for safety purposes;

(iv) Non-selectable transponders must not be used to enhance detection of marine craft;

(4) In the 2920–3100 MHz and 9320–9500 MHz bands shore station radar transponders used only as racons will be authorized.

(e) In addition to the other technical requirements contained in subpart E of this part search and rescue transponder stations must meet the following technical standards contained in the latest international Radio Consultative Committee (CCIR) Recommendation 628 titled “Technical Characteristics for a Search and Rescue Radar Transponder”:

(1) Operate in the 9300–9500 MHz band;

(2) Be horizontally polarized at their source;

(3) Have an effective receiver sensitivity including its antenna gain better than –50 dBm;

(4) Operate within specifications between the temperatures of –20 and +50 degrees Celsius;

(5) Operate within specifications for at least 48 hours at 0 degrees Celsius without changing batteries;

(6) Have a sawtooth sweep with a 5 microseconds  $\pm$  0.5 microseconds rate and return of less than 0.5 microseconds;

(7) Have a pulse emission of 100 microseconds maximum duration;

(8) Have a recovery time following excitation of 10 microseconds or less;

(9) Have a delay between receipt of a radar signal and start of transmissions of 1.25 microseconds or less;

(10) Have an antenna whose vertical beamwidth is no less than 25 degrees and its azimuthal beamwidth is omnidirectional within 2 dB; and

(11) Suppress interference caused by the interrogating radar antenna’s sidelobes.

[51 FR 31213, Sept. 2, 1986, as amended at 52 FR 7419, Mar. 11, 1987; 55 FR 6394, Feb. 23, 1990; 57 FR 26779, June 16, 1992; 58 FR 44953, Aug. 25, 1993]

EFFECTIVE DATE NOTE: At 68 FR 46970, Aug. 7, 2003, § 80.375 was amended by revising paragraphs (a) and (e) and removing paragraphs (d)(2)(vii), (d)(3), and (d)(4) effective October 6, 2003. For the convenience of the user the revised text is set forth as follows:

### § 80.375 Radiodetermination frequencies.

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(a) *Direction finding frequencies.* The carrier frequencies assignable to ship stations for directional finding operations are:

#### Carrier Frequency

8364 kHz  
121.500 MHz  
243.00 MHz

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(e) *Search and rescue radar transponder stations.* The technical standards for search and rescue transponder stations are in subpart W of this part.

### SHIP EARTH STATIONS

### § 80.377 Frequencies for ship earth stations.

The frequency band 1626.5–1645.5 MHz is assignable for communication, radiodetermination and telecommand messages, and developmental operations that are associated with the position, orientation and operational functions of maritime satellite equipment. The frequency band 1645.5–1646.5 MHz is reserved for use in the Global Maritime Distress and Safety System (GMDSS).

[51 FR 31213, Sept. 2, 1986, as amended at 57 FR 26779, June 16, 1992]

### AIRCRAFT STATIONS

### § 80.379 Maritime frequencies assignable to aircraft stations.

This section describes the maritime frequencies assignable to aircraft stations for simplex operations: